REMARKS

Applicants' representatives have noted an error in the remarks submitted on June 10, 2010 and wish to bring it to the Examiner's attention. In the June 10, 2010 remarks, the statement was made that all of the independent claims had been amended to recite the use of the AAV vector. This was incorrect insofar as claim 12 is so not limited. Nonetheless, Applicants submit that claim 12 satisfies the enablement requirements of §112.

Rejection Under 35 U.S.C. § 112, First Paragraph, Enablement

Claims 2, 11-12 and 20-28 stand rejected under 35 U.S.C. § 112, first paragraph, because the specification "does not reasonably provide enablement for a composition comprising any vector encoding *any* NMDA receptor antigen, nor for a method of modulating or delaying onset of epilepsy, stroke, or decreased cognition in *any* subject, by administration of *any* vector encoding any NMDA receptor antigen." Applicants incorporate by reference the arguments made in the June 10, 2010 remarks and supplement those remarks as follows:

Any vector

The Office Action asserts that the invention is only enabled for use with an adeno-associated virus vector. Applicant disagrees that the claims are not enabled for different vectors.

Claim 12 is directed to a composition comprising a nucleic acid sequence encoding for an NMDAR-1 antigen. One skilled in the art would be familiar with the ability to make and use the composition of claim 12 with or without a vector. Additionally, dependent claims 20-22 recite specific forms of a vector that can encode the nucleic acid.

The specification is replete with teachings and examples for use of different vector systems. See, for example, section IV "Delivery Systems" of the specification, paragraphs [0135]-[0148], for discussion on the uses of different vectors. Based on these teachings one of ordinary skill in the art would be capable of utilizing an array of vectors or delivery systems. In fact, as Applicant has stated previously, one of ordinary skill in the art having familiarity with AAV vectors, would have knowledge to make and use other vectors or delivery compositions.

Moreover, as demonstrated in Appendices A-C, submitted with the response on June 10, 2010, all three groups utilized different vector systems and were capable of producing an immune response to the DNA antigen in either animals or humans. Therefore, limiting the claims to AAV vectors is unnecessarily narrowing and improper in light of the teachings of the specification and knowledge of one of ordinary skill in the art.

In summary, the Examiner bears the burden of establishing a basis for questioning enablement. See MPEP 2164.04. Despite numerous office actions, a reasonable basis for rejecting the scope of Applicant's method claims, especially claim 12, has not been presented.

CONCLUSION

In view of the above remarks, Applicant' respectfully requests reconsideration and allowance of the application. The Examiner is invited to call the undersigned at (617) 439-2948 if there are any questions. In the event that the amendments do not place this case in condition for allowance, entry of the amendments and a further advisory action are requested to facilitate appeal.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 141449, under Order No. 106604-7.

Dated: June 14, 2010

Respectfully submitted,

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